

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,062	04/27/2001	Ramon Vega	60005174Z146	1683

7590 04/07/2003
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80528-9599

EXAMINER

TRAN, LY T

ART UNIT PAPER NUMBER

2853

DATE MAILED: 04/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/845,062

Applicant(s)

VEGA ET AL.

Examiner

Ly T TRAN

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-26 is/are pending in the application.
- 4a) Of the above claim(s) 17 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-15 and 23-26 is/are allowed.
- 6) ☒ Claim(s) 1-6, 16 and 18-22 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of species 1 without traverse have been made on September 8, 2002 during an oral election with Mr. Peter Leppman.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4,5, 6, 16, 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Osborne et al. (USPN 5,896,145).

With respect to claims 1 and 22, Osborne et al disclose:

- At least one print head arranged to ejected ink drops in a spitting operation (Fig.7)
- A generally planar shelf mounted for rocking motion between a first position for directly receiving and retaining the ejected ink from the print head and a second position for transferring the receiving ink to the spittoon by spilling the received ink from the shelf into the spittoon (Fig.7, Column 6: line 15-35)

With respect to claim 4, Osborne et al discloses the shelf is substantially horizontal when in the first position (Fig.7)

With respect to claim 5, Osborne et al. discloses an ink jet apparatus and a method comprising:

- At least one print head arranged to eject ink drops in a spitting operation
Column 6: line 63-67, Column 7: line 1-6)
- A temporary spittoon arranged to move between first and second position (Fig.3: element 70), the temporary spittoon being arranged in the first position such that the ink drops are ejected onto a surface of the temporary spittoon, the temporary spittoon being further arranged to transfer the ink to the spittoon when in the second position (Fig.3, Column 8: line 2-58)
- the temporary spittoon is mounted on a shuttle, the shuttle being arranged to move the temporary spittoon between the first and second position (Fig.3)
- In the second position, the temporary spittoon being arranged to transfer the ink to the spittoon and being located sufficiently distant from the nozzle plate to allow a capping or wiping operation to be performed (Fig.3)
- A reciprocating shuttle arranged to move between first and second position and to actuate the spitting and the capping assembly (Fig.3: element 70, 64, 65)
- The spitting surface is located in a position such that the ink ejected onto the spitting surface is transferable under gravity to a permanent ink storage container (Fig.3: element 90, 96, 74).

Art Unit: 2853

With respect to claim 6, Osborne et al. disclose the temporary spittoon is arranged to be orientated in a first orientation when in the first position and in a second orientation different to the first orientation when positioned in the second position such that when positioned in the second position the temporary spittoon is arranged to transfer the ink on the spittoon surface under gravity (Fig.3: element 95)

With respect to claim 16, Osborne et al. discloses a plurality of pens, wherein in the first position the temporary spittoon is arranged such that ink drops ejected in spittoon operations by one or more of plurality of pens onto a surface of the temporary spittoon (Column 8: line 13-18)

With respect to claim 18, Osborne et al. discloses one scraper arranged removed ink from the temporary spittoon surface as temporary spittoon moves between the first and second position (Fig.3: element 90).

With respect to claim 19, Osborne et al. discloses the device is arranged such that in the second position the temporary spittoon is located substantially in contact with the spittoon of ink stored, the temporary spittoon being adapted such that the ink on the temporary spittoon surface is able to flow from the temporary spittoon the spittoon (Fig.3: element 95).

With respect to claim 20, Osborne et al. discloses the temporary spittoon comprises a porous body adapted to allow the ink on the temporary spittoon surface to flow through the temporary spittoon to spittoon (Column 9: line 10-12).

With respect to claim 21, Osborne et al. discloses the ink jet device is a printer (Column 10: line 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2 and 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al. (USPN 5,617,124) in view of Anderson et al. (USPN 6,318,838).

With respect to claims 2 and 3, Taylor et al discloses:

- At least one print head arranged to eject ink drops in a spitting operation
Column 6: line 63-67, Column 7: line 1-6)
- A temporary spittoon arranged to move between first and second position
(Fig.3: element 70), the temporary spittoon being arranged in the first position
such that the ink drops are ejected onto a surface of the temporary spittoon,
the temporary spittoon being further arranged to transfer the ink to the
spittoon when in the second position (Fig.3, Column 8: line 2-58)

However, Taylor fails to teach the surface of the temporary spittoon is approximately 1 mm to 10 mm or 6 mm from the print head.

Anderson et al. teaches the surface of the temporary spittoon is approximately 1 mm to 10 mm from the print head (Column 9: line 9-14) or 6 mm (Column 3: line 20-35)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of Taylor to have the surface of the

Art Unit: 2853

temporary spittoon is approximately 1 mm to 10 mm from the print head as taught by Anderson et al for the purpose of preventing the droplet drift away from the intended spit target and preventing loose fibers on the surface of the absorber from contacting the print head.

Allowable Subject Matter

4. Claims 9-15, 23-26 are allowed.

- The primary reason for the allowance of claims 9-13 is the inclusion of the limitation of an ink jet print device comprising the temporary spittoon comprises a flexible material fixedly mounted to the shuttle, the temporary spittoon being arranged to bend or deform between the first and second orientations. It is limitation found in each claims, as it is claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.
- The primary reason for the allowance of claims 14 and 15 is the inclusion of the limitation of an ink jet print device comprising print head servicing comprising a cap or a wiper arranged to be moveable between a non-active position distant from the print head and an active position adjacent to the print head, wherein the movement of the temporary spittoon is linked to that of the servicing element such that the temporary spittoon is arranged to be in the first position when the servicing element is in the non-active position and to be in the second position when the servicing

Art Unit: 2853

element is in active position. It is limitation found in each claims, as it is claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.

- The primary reason for the allowance of claim 23 is the inclusion of the limitation of an ink jet print device comprising a second position relatively more distant from the nozzle plate to allow capping or wiping of the nozzle plate. It is limitation found in each claims, as it is claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.
- The primary reason for the allowance of claims 24 is the inclusion of the limitation of an ink jet print device comprising the servicing assembly comprising a reciprocating shuttle arrange to move between first and second position and when the shuttle is in the second position, the cap assembly substantially caps the nozzle plate and the spitting surface is located in a position such that the ink is transferable under gravity to a permanent ink storage container. It is limitation found in each claims, as it is claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.

Art Unit: 2853

- The primary reason for the allowance of claim 25 is the inclusion of the limitation of an ink jet print device comprising translating the spitting surface to a second position relatively more remote from the print head, allowing clearance for the print head wiping or capping, and at the second position inclining the planar spitting surface to discharge the retained into the spittoon. It is limitation found in each claims, as it is claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.
- The primary reason for the allowance of claim 26 is the inclusion of the limitation of an ink jet print device comprising capping or wiping the print head when the spitting surface is in the second position. It is limitation found in each claims, as it is claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.

5. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 7 and 8 appear to be allowable over prior art of record because at least prior art has not been found to anticipate or teach or suggest the temporary spittoon is rotatably mounted to the shuttle and arranged to pivot relative to the shuttle between the first and second position.

Art Unit: 2853

Response to Arguments

6. Applicant's arguments with respect to claims 2 and 3 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's argument that Taylor et al fails to teach the distance from the head to the temporary spittoon surface is approximately 1 mm to 10 mm or 6 mm is persuasive but is moot in view of Anderson et al.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T TRAN whose telephone number is 703-308-0752. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 703-308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0967.



March 27, 2003



LAMSON NGUYEN
PRIMARY EXAMINER
04/03/03